

**DERWENT- 1997-352093**  
**ACC-NO:**

**DERWENT- 200519**  
**WEEK:**

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**TITLE:** Flexible cellulose fibres production with reduction of e.g. orientation - involves passing wet fibre through bath containing water and water-miscible alkanol, di:ol and/or tri:ol and washing bath containing one of these

**INVENTOR:** FINK, H; FRIGGE, K ; REMDE, H ; WALENTA, E ; WEIGEL, P

**PATENT- FRAUNHOFER GES FOERDERUNG ANGEWANDTEN[FRAU] , FRAUNHOFER**  
**ASSIGNEE: GES FOERDERUNG ANGEWANDTEN EV[FRAU]**

**PRIORITY-DATA:** 1996DE-1000572 (January 9, 1996)

**PATENT-FAMILY:**

<b>PUB-NO</b>	<b>PUB-DATE</b>	<b>LANGUAGE</b>	<b>PAGES</b>	<b>MAIN-IPC</b>
DE 19600572 B4	March 10, 2005	N/A	000	D01F 002/02
DE 19600572 A1	July 10, 1997	N/A	005	D01F 002/02
WO 9725462 A1	July 17, 1997	G	019	D01F 002/00
EP 876522 A1	November 11, 1998	G	000	D01F 002/00
US 6103162 A	August 15, 2000	N/A	000	D01D 010/06
EP 876522 B1	March 21, 2001	G	000	D01F 002/00
DE 59606647 G	April 26, 2001	N/A	000	D01F 002/00

**DESIGNATED- RU US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE AT BE**  
**STATES: DE GB AT BE DE GB**

**CITED-DOCUMENTS:** 2.Jnl.Ref; DE 4420304 ; WO 9214871

**APPLICATION-DATA:**

<b>PUB-NO</b>	<b>APPL-DESCRIPTOR</b>	<b>APPL-NO</b>	<b>APPL-DATE</b>
DE 19600572B4	N/A	1996DE-1000572	January 9, 1996
DE 19600572A1	N/A	1996DE-1000572	January 9, 1996
WO 9725462A1	N/A	1996WO-DE02190	November 13, 1996
EP 876522A1	N/A	1996EP-0945731	November 13, 1996
EP 876522A1	N/A	1996WO-DE02190	November 13, 1996
EP 876522A1	Based on	WO 9725462	N/A
US 6103162A	N/A	1996WO-DE02190	November 13, 1996
US 6103162A	N/A	1998US-0091679	December 14, 1998
US 6103162A	Based on	WO 9725462	N/A
EP 876522B1	N/A	1996EP-0945731	November 13, 1996
EP 876522B1	N/A	1996WO-DE02190	November 13, 1996
EP 876522B1	Based on	WO 9725462	N/A
DE 59606647G	N/A	1996DE-0506647	November 13, 1996
DE 59606647G	N/A	1996EP-0945731	November 13, 1996
DE 59606647G	N/A	1996WO-DE02190	November 13, 1996
DE 59606647G	Based on	EP 876522	N/A
DE 59606647G	Based on	WO 9725462	N/A

**INT-CL (IPC):** D01D010/06, D01F002/00 , D01F002/02 , D01F011/02

**ABSTRACTED-PUB-NO:** DE 19600572A

**BASIC-ABSTRACT:**

Production of flexible cellulose fibres involves spinning cellulose solutions through spinnerets through an air gap into an aqueous and/or alcoholic coagulation bath containing amine oxide and then drying. The novelty is that, before drying, the moist spun fibre is passed through after-treatment bath(s) containing water and water-miscible alcohol(s), diol(s) and/or triol(s) and washing bath(s) containing water, an alkanol, a diol or a triol.

Also claimed are cellulose fibres made by this method, which have an initial modulus < 1500 cN/tex.

Preferably the after-treatment bath is alkaline and especially consists of a mixture of alkanol and aqueous sodium hydroxide (NaOH) solution, more especially ethanol (EtOH) and 1-30% aqueous NaOH solution. The washing bath contains EtOH.

**ADVANTAGE** - The orientation, modulus, brittleness and tendency of the fibres to fibrillate are all reduced compared with the usual fibres spun from solutions in amine oxides, especially N-methylmorpholine N-oxide ( NMMNO), or aqueous NMMNO.

**ABSTRACTED-PUB-NO:** EP 876522B

#### **EQUIVALENT-ABSTRACTS:**

Production of flexible cellulose fibres involves spinning cellulose solutions through spinnerets through an air gap into an aqueous and/or alcoholic coagulation bath containing amine oxide and then drying. The novelty is that, before drying, the moist spun fibre is passed through after-treatment bath(s) containing water and water-miscible alcohol(s), diol(s) and/or triol(s) and washing bath(s) containing water, an alkanol, a diol or a triol.

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**US 6103162A**

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**CHOSEN- Dwg.0/0**  
**DRAWING:**

**TITLE- FLEXIBLE CELLULOSE FIBRE PRODUCE REDUCE ORIENT PASS WET FIBRE**  
**TERMS: THROUGH BATH CONTAIN WATER WATER MISCIBLE ALKANOL DI OL TRI**  
**OL WASHING BATH CONTAIN ONE**

**DERWENT-CLASS: A11 F01**

**CPI-CODES: A03-A05A; A11-B15C; A12-S05L; F01-C08C; F01-D06;**

**ENHANCED- Polymer Index [1.1] 018 ; R01852\*R G3634 D01 D03 D11 D10 D23 D22 D31**  
**POLYMER- D42 D50 D76 D86 F24 F29 F26 F34 H0293 P0599 G3623 ; S9999 S1627**  
**INDEXING: S1605 ; S9999 S1070\*R ; S9999 S1616 S1605**

**Polymer Index [1.2] 018 ; ND07 ; B9999 B4035 B3930 B3838 B3747 ;**  
**N9999 N6995 N6962 ; N9999 N6860 N6655 ; N9999 N6882 N6655 ; N9999**  
**N6780\*R N6655 ; B9999 B3714 B3690 ; B9999 B4080 B3930 B3838 B3747**  
**; B9999 B5265 B4740 ; B9999 B4193 B4091 B3838 B3747 ; B9999 B3907**  
**B3838 B3747**

**Polymer Index [1.3] 018 ; D01 D11 D10 D23 D22 D31 D76 D41 D42 D50**  
**D85 F20 F34 N\* 5A O\* 6A ; R01740 G2335 D00 F20 H\* O\* 6A ; A999 A475 ;**  
**A999 A771**

**SECONDARY-ACC-NO:**

**CPI Secondary Accession Numbers: C1997-113951**